**BACKGROUND**

LMX1A, also called LMX-1.1 or LIM homeobox transcription factor 1 α, belongs to the LIM-homeodomain family. Members of this family are known to be important for pattern formation during development. LMX1A functions in the nucleus as a transcriptional activator to the insulin gene promoter. In the developing embryo, LMX1A is expressed along the neuraxis and leads to the development of the roof plate of the vertebrae. Two isoforms of LMX1A exist due to alternative splicing. Isoform 1 represents the full-length protein and is expressed in many tissues including fetal brain, but is absent in heart, liver, spleen and testis. The second isoform, designated LMX1A-4AB, lacks amino acids 1-249 and is expressed in tests.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: LMX1A (human) mapping to 1q23.3; Lmx1a (mouse) mapping to 1H2.3.

**SOURCE**

LMX1A (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LMX1A of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54273 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and CHIP applications, sc-54273 X, 200 µg/0.1 ml.

**APPLICATIONS**

LMX1A (C-17) is recommended for detection of LMX1A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LMX1A siRNA (h): sc-72343, LMX1A siRNA (m): sc-72344, LMX1A shRNA Plasmid (h): sc-72343-SH, LMX1A shRNA Plasmid (m): sc-72344-SH, LMX1A shRNA (h) Lentiviral Particles: sc-72343-V and LMX1A shRNA (m) Lentiviral Particles: sc-72344-V.

LMX1A (C-17) X TransCruz antibody is recommended for Gel Supershift and CHIP applications.

Molecular Weight of LMX1A isoform 1: 43 kDa.

Molecular Weight of LMX1A isoform LMX1A-4AB: 15 kDa.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our website at www.scbt.com or our catalog for detailed protocols and support products.